

Claims:

1. A host-side wireless interface that services communications between a wireless user input device and a serviced host, the host-side wireless interface comprising:

5 a wireless network interface that wirelessly communicates with the wireless user input device;

a host interface communicatively coupled to the wireless interface and to the serviced host;

wherein when the serviced host initiates bootstrap operations via a Basic Input/Output System (BIOS), the host interface operates in a BIOS host interface mode to allow input from the wireless user input device to the BIOS during the bootstrap operations; and

10 wherein when the serviced host initiates Operating System (OS) operations, the host interface operates in an OS host interface mode, wherein the OS host interface mode differs from the BIOS host interface mode.

2. The host-side wireless interface of claim 1, wherein:

15 during both the initiation of the bootstrap operations and the initiation of the OS operations, the host interface firstly presents to the serviced host an interface configuration corresponding to the OS host interface mode and secondly presents to the serviced host an interface configuration corresponding to the BIOS host interface mode;

20 during the bootstrap operations, the BIOS does not recognize the configuration corresponding to the OS host interface mode but does recognizes the configuration corresponding to the BIOS host interface mode;

the OS recognizes both the configuration corresponding to the OS host interface mode and the configuration corresponding to the BIOS host interface mode; and

the OS selects the firstly presented configuration corresponding to the OS host interface mode.

3. The host-side wireless interface of claim 2, wherein:

5 the configuration corresponding to the BIOS host interface mode comprises a Universal Serial Bus (USB) Human Interface Device (HID) configuration; and

the configuration corresponding to the OS host interface mode comprises a Bluetooth HID configuration.

10 4. The host-side wireless interface of claim 3, wherein:

the BIOS is not Bluetooth aware and does not recognize the Bluetooth HID configuration;
and

the OS is Bluetooth aware and recognizes the Bluetooth HID configuration.

15 5. The host-side wireless interface of claim 1, wherein the host interface further comprises:

a hub that operably couples to the serviced host via a host interface bus;

a BIOS host interface module operably coupled to the hub that supports the BIOS host interface mode; and

20 an OS host interface module operably coupled to the hub that supports the OS host interface mode.

6. The host-side wireless interface of claim 5, wherein in the bootstrap operations of the serviced host, the BIOS recognizes the BIOS host interface module but does not recognize the OS host interface module.

5 7. The host-side wireless interface of claim 5, wherein in the OS operations of the serviced host, the OS selects the OS host interface module for servicing.

8. The host-side wireless interface of claim 5, wherein:
the BIOS host interface module supports a Universal Serial Bus (USB) Human Interface
10 Device (HID) configuration; and
the OS host interface module supports a Bluetooth HID configuration.

9. The host-side wireless interface of claim 1, wherein the wireless network interface wirelessly communicates with the wireless user input device according to at least one version of the
15 Bluetooth operating standard.

10. The host-side wireless interface of claim 1, further comprising a microprocessor unit operably coupled to the wireless network interface and to the host interface.

20 11. The host-side wireless interface of claim 1, wherein the wireless user input device is selected from the group consisting of at least a wireless keyboard and a wireless mouse.

12. The host-side wireless interface of claim 1, further comprising non-volatile memory in which configuration information for the wireless user input device is stored, wherein the configuration information stored in the non-volatile memory is employed by the host-side wireless interface in the BIOS host interface mode.

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13. A computer peripheral adapter that services communications between a wireless user input device and a serviced host computer, the computer peripheral adapter comprising:

a bus coupler that couples the computer peripheral adapter to a peripheral bus of the serviced computer;

10 a wireless network interface that wirelessly communicates with the wireless user input device;

a host interface communicatively coupled to the bus coupler and to the wireless interface;

wherein when the serviced host computer initiates bootstrap operations via a Basic Input/Output System (BIOS), the host interface operates in a BIOS host interface mode to allow
15 input from the wireless user input device to the BIOS during the bootstrap operations; and

wherein when the serviced host computer initiates Operating System (OS) operations, the host interface operates in an OS host interface mode to allow input from the wireless user input device to the OS, wherein the OS host interface mode differs from the BIOS host interface mode.

20 14. The computer peripheral adapter of claim 13, wherein:

during both the initiation of the bootstrap operations and the initiation of the OS operations, the host interface firstly presents to the serviced host computer an interface configuration corresponding to the OS host interface mode and secondly presents to the serviced host computer

an interface configuration corresponding to the BIOS host interface mode;

during the bootstrap operations, the BIOS does not recognize the configuration corresponding to the OS host interface mode but does recognizes the configuration corresponding to the BIOS host interface mode;

5 the OS recognizes both the configuration corresponding to the OS host interface mode and the configuration corresponding to the BIOS host interface mode; and

the OS selects the firstly presented configuration corresponding to the OS host interface mode.

10 15. The computer peripheral adapter of claim 14, wherein:

the configuration corresponding to the BIOS host interface mode comprises a Universal Serial Bus (USB) Human Interface Device (HID) configuration; and

the configuration corresponding to the OS host interface mode comprises a Bluetooth HID configuration.

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16. The computer peripheral adapter of claim 15, wherein:

the BIOS is not Bluetooth aware and does not recognize the Bluetooth HID configuration;
and

the OS is Bluetooth aware and recognizes the Bluetooth HID configuration.

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17. The computer peripheral adapter of claim 13, further comprising non-volatile memory in which configuration information for the wireless user input device is stored, wherein the configuration information stored in the non-volatile memory is employed by the host-side wireless interface in the BIOS host interface mode.

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18. A computer peripheral adapter that services communications between a wireless user input device and a serviced host computer, the computer peripheral adapter comprising:

a bus coupler that couples the computer peripheral adapter to a peripheral bus of the serviced computer;

10 a wireless network interface that wirelessly communicates with the wireless user input device;

a host interface communicatively coupled to the bus coupler and to the wireless interface that includes:

15 a hub that operably couples to the serviced host computer via the bus coupler and the peripheral bus;

a Basic Input/Output System (BIOS) host interface module operably coupled to the hub that supports BIOS host interface operations; and

an Operating System (OS) host interface module operably coupled to the hub that supports OS host interface operations;

20 wherein when the serviced host computer initiates bootstrap operations via a BIOS, the serviced host computer accesses the BIOS host interface operations of the BIOS host interface module; and

wherein when the serviced host computer initiates OS operations, the serviced host computer accesses the OS host interface host operations of the OS host interface module.

5 19. The computer peripheral adapter of claim 18, wherein in the bootstrap operations of the serviced host, the BIOS recognizes the BIOS host interface module but does not recognize the OS host interface module.

10 20. The computer peripheral adapter of claim 18, wherein in the OS operations of the serviced host, the OS selects the OS host interface module for servicing.

21. The computer peripheral adapter of claim 18, wherein:
the BIOS host interface module supports a Universal Serial Bus (USB) Human Interface Device (HID) configuration; and
the OS host interface module supports a Bluetooth HID configuration.

15 22. The computer peripheral adapter of claim 18, further comprising non-volatile memory in which configuration information for the wireless user input device is stored, wherein the configuration information stored in the non-volatile memory is employed by the host-side wireless interface in the BIOS host interface mode.

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23. A method for operating a host-side wireless interface that is operably coupled to a serviced host computer to support communications from a wireless user input device to the serviced host computer, the method comprising:

5 during a first operation, interfacing with a Basic Input/Output System (BIOS) of the serviced host computer while the serviced host computer is performing bootstrap operations, wherein interfacing with the BIOS of the serviced host computer includes operating the host-side wireless interface in a BIOS host interface mode to allow input from the wireless user input device to the BIOS during the bootstrap operations; and

10 during a second operation, interfacing with an Operating System (OS) of the serviced host computer, wherein interfacing with the OS of the serviced host computer includes operating the host-side wireless interface in an OS host interface mode to allow input from the wireless user input device to the OS, wherein the OS host interface mode differs from the BIOS host interface mode.

24. The method of claim 23, wherein the method includes:

15 firstly presenting a configuration corresponding to the OS host interface mode and secondly presenting a configuration corresponding to the BIOS host interface mode;

the BIOS recognizing the configuration corresponding to the BIOS host interface mode but not recognizing the configuration corresponding to the OS host interface mode;

20 the OS recognizing both the configuration corresponding to the OS host interface mode and the configuration corresponding to the BIOS host interface mode; and

the OS selecting the firstly presented configuration corresponding to the OS host interface mode.

25. The method of claim 23, wherein:

the configuration corresponding to the BIOS host interface mode comprises a Universal Serial Bus (USB) Human Interface Device (HID) configuration; and

5 the configuration corresponding to the OS host interface mode comprises a Bluetooth HID configuration.

26. The method of claim 25, wherein:

the BIOS is not Bluetooth aware and does not recognize the Bluetooth HID configuration;
and

10 the OS is Bluetooth aware and recognizes the Bluetooth HID configuration.

27. The method of claim 23, wherein the wireless network interface wirelessly communicates with the wireless user input device according to at least one version of the Bluetooth operating standard.

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28. The method of claim 23, further comprising:

storing configuration information for the wireless user input device in non-volatile memory of the host-side wireless interface; and

20 retrieving the configuration information stored in the non-volatile memory of the host-side wireless interface for use by the host-side wireless interface in the BIOS host interface mode.